

Reconsideration of the above-identified application is respectfully requested in view of the following amendments and remarks.

REMARKS

Status of the Claims

Claims 1-26 are currently pending. The Examiner has rejected claims 1-26.

Claim 3 has been cancelled.

Claims 1-2 and 22 have been amended. Support for amendment to claims 1-2 and 22 can be found, *inter alia*, in the specification at page 11, lines 7-10, Example 2, page 18 and Example 4, page 20.

No new matter has been added.

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1, 4-12, 15 and 18 under 35 U.S.C. §102(b) as being anticipated by Cornelius et al. (U.S. Pat. No. 4,677,141).

According to the Examiner, “Cornelius discloses a method of improving the heat stability of silicone elastomers with pretreated white clay (abstract).” See Office Action page 2. The Examiner continues, “Although Cornelius does not explicitly disclose the ‘greater than 1.0 wt%’ of organosilane generally used to pretreat the kaolin clay, he discloses ‘approximately 1 percent by weight’ is used. Therefore, since ‘approximately’ inherently includes values slightly above and below 1 percent, Cornelius anticipates the currently claimed range, particularly at values just above 1.0 wt%.” See Office Action at page 3, second paragraph. Applicant respectfully traverses this rejection.

To anticipate a claim, a reference must teach every element of the claim. See M.P.E.P. § 2131, Eighth Edition, Rev. Aug. 2006 at page 2100-67 (emphasis added). Applicant has amended claim 1 to read, “[a] resin composition comprising a silicon resin containing a reinforcing amount of a particular kaolin filler, said particulate kaolin filler having been pretreated so as to contain greater than 1.2 wt. % up to 12.0 wt. % of an amino-functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane.” See Claim 1, as presently amended (emphasis added). Applicant respectfully point out that Cornelius et al. does not disclose or suggest the use of a kaolin filler which has been pretreated so as to contain greater than 1.2 wt. % of an amino-functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane, as presently claimed. There is no indication or further disclosure in Cornelius et al. indicating that an amount greater than 1.2% can be used, nor is there any indication that the use of greater than 1.2% would have any additional benefit. Applicant asserts that “approximately 1 percent” is not the equivalent of “greater than 1.2 wt %,” as currently claimed by Applicant. See currently pending claim 1. Importantly, none of the additional examples disclosed in Cornelius et al. contain greater than 1.0 wt %, let alone greater than 1.2 wt. %, of an amino-functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane. See Examples 2-8 of Cornelius et al.

Furthermore, Applicant respectfully directs the Examiner’s attention to Example 4 of Applicant’s specification, at page 20. This example compares three different surface treatments, 0.8 wt. %, 1.0 wt %, and 1.24 wt. %, respectfully. From the example, it is clear that with only a slight percentage increase in surface treatment the silicon elastomer has superior hardness, tensile strength, elongation at break, modulus at 100% E, and tear strength. See Example 4 and Table in the specification

at page 20. Applicants respectfully assert that greater than 1.2 wt. % is commensurate in scope with the data presented in Example 4. Example 4 discloses the use of 1.24 wt. %, clearly 1.24 wt. % is only a trivial increase in value compared to the greater than 1.2 wt. % presently claimed. As such, it is Applicants' position that "greater than 1.2 wt. %" is within the trend set forth by Example 4, which shows that 1.24 wt. % has greater stability, etc. than 0.8 wt. % and 1.0 wt. %. According to the M.P.E.P., "[t]he nonobviousness of a broader claimed range can be supported by evidence based on unexpected results from testing a narrower range if one of ordinary skill in the art would be able to determine a trend in exemplified data which would allow the artisan to reasonable extend the probative value thereof." See M.P.E.P. §716.02(d), Eighth Edition, Rev. 5, Aug. 2006 at page 700-293 (citing *In re Kollman*, 595 F.2d48, 201 USPQ 193 (CCPA 1979). It is Applicants position that the data presented in Example 4 establishes such a trend.

As such, Applicants respectfully assert that Cornelius et al. does not and cannot anticipate claim 1 of the presently claimed invention. Claims 4-12, 15 and 18, which depend directly or indirectly from claim 1, are likewise not be anticipate by Cornelius et al. Reconsideration and withdrawal of this rejection are respectfully requested.

The Examiner has rejected claims 1-3, 5-9 and 19 under 35 U.S.C. §102(b) as being anticipated by Hill (U.S. Pat. No. 5,807,921).

According to the Examiner, "Hill discloses a composition containing a silicone elastomer and aminofunctional siloxane in an amount of 0.10 to 10 wt% based on the silicone elastomer (abstract, col 11, lines 31-49). Kaolin clay is added to the composition (col 12, lines 25-35; example 14)." See Office Action at page 3,

fourth paragraph. The Examiner then concludes that Hill anticipates claims 1-3, 5-9 and 19. Applicant respectfully traverses this rejection.

As Applicant points out hereinabove, the presently claimed invention is directed to, “[a] resin composition comprising a silicon resin containing a reinforcing amount of a particular kaolin filler, said particulate kaolin filler having been pretreated so as to contain greater than 1.2 wt. % up to 12.0 wt. % of an amino-functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane.” See Claim 1, as presently amended (emphasis added). In contrast, Hill et al. is directed to an aqueous silicone emulsion which comprises: (A) a diorganosiloxane polymer; (B) water; (C) a surfactant; (D) a crosslinker; (E) a tin condensation catalyst; and (F) an aminofunctional siloxane. See the Hill et al. at col. 3, line 62 through col. 9, line 14. Hill et al. continues, “[a]dditional optional ingredients such as fillers and other ingredients may be added with other components, as desired, to affect certain performance properties of the silicone emulsion... [including] calcium carbonate, titanium dioxide, zinc oxide, iron oxide or kaolin clay.” See Hill et al. at col. 12, lines 25-31. However, there is no disclosure or indication whatsoever that the kaolin clay disclosed is treated so as to contain greater than 1.2 wt. % of the disclose aminofunctional siloxane. In fact, there is no discussion whatsoever in Hill et al. of pretreating the disclosed kaolin clay in any way whatsoever. Applicants further note that the Examiner’s rejection does not even suggest that the kaolin clay disclosed in Hill et al. is pretreated in any way.

As such, Applicants respectfully assert that Hill et al. does not disclose or suggest all of the claim elements of the presently claimed invention, and therefore, does not and cannot anticipate claim 1 of the presently claimed invention. Claims 2-

3, 5-9 and 19, which depend directly or indirectly therefrom are likewise not anticipated by Hill et al. Reconsideration and withdrawal are respectfully requested.

The Examiner has rejected claims 1-3, 11, 16, 18-19, 21-23 and 26 under 35 U.S.C. §102(b) as being anticipated by Sekutowski (U.S. Pat. No. 4,740,538). Applicant respectfully traverses this rejection.

As stated hereinabove, currently pending claim 1 is directed to, “[a] resin composition comprising a silicon resin containing a reinforcing amount of a particular kaolin filler, said particulate kaolin filler having been pretreated so as to contain greater than 1.2 wt. % up to 12.0 wt. % of an amino-functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane.” See Claim 1, as presently amended (emphasis added). As such, it is clear that the currently pending claims are directed to a silicon elastomers which comprises a silicone resin and a pretreated kaolin filler. According to Applicants’ disclosure, the silicon elastomers of the invention have “improved heat stability comprising a mixture of a silicon resin and a specified pretreated kaolin” which results in “improvements in heat stability and physical properties for the resulting silicone elastomer.” See Specification at page 5, lines 15-19. In contrast, Sekutowski discloses “a nylon plastic composite containing a kaolin filler coated with an amino functional silane coupling agent that results in an improved impact strength.” See Office Action at page 3, fifth paragraph (emphasis added). Sekutowski does not disclose or teach a silicon resin containing a reinforcing amount of the claimed treated filler. As such, Sekutowski does not and cannot anticipate claim 1 of the presently claimed invention, and thus, cannot and does not anticipate claims 2-3, 11, 16, 18-19, 21, which depend directly or indirectly therefrom.

Claim 22 is directed to a “[a] method of improving the heat stability and physical properties of a silicone resin comprising mixing with the silicone resin a reinforcing amount of a particulate filler having been pretreated... so as to contain at least 1.10 wt. % up to 12.0 wt. % of an amino- functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane.” See Claim 22, as presently amended (emphasis added).

As such, it is Applicants’ position that claim 22, like claim 1, cannot be and is not anticipated by Sekutowski. Claims 23-26, which depend directly or indirectly therefrom, are likewise not anticipated by Sekutowski. Reconsideration and withdrawal of this rejection are respectfully requested.

Rejections under 35 U.S.C. § 103

The Examiner has rejected claims 1-3, 11, 16, 18-19, 21-23 and 26 under 35 U.S.C. §103(a) as being unpatentable over Cornelius et al. (U.S. Pat. No. 4,677,141). Applicant respectfully traverses this rejection.

According to the M.P.E.P., “[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” See M.P.E.P § 2143.03, Eighth Edition, Rev. Aug. 2006 at page 2100-131 (emphasis added). As pointed out hereinabove, Cornelius et al. does not teach or suggest all the claim limitations of the presently claimed invention. Specifically, Claim 1 has been amended to claim “[a] resin composition comprising a silicon resin containing a reinforcing amount of a particular kaolin filler, said particulate kaolin filler having been pretreated so as to contain greater than 1.2 wt. % up to 12.0 wt. % of an amino-functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane. See claim 1, as amended (emphasis added).

Furthermore, Applicant respectfully directs the Examiner's attention to Example 4 of Applicant's specification, at page 20. This example compares three different surface treatments, 0.8 wt. %, 1.0 wt %, and 1.24 wt. %, respectfully. From the example, it is clear that with only a slight percentage increase in surface treatment the silicon elastomer has superior hardness, tensile strength, elongation at break, modulus at 100% E, and tear strength. See Example 4 and Table in the specification at page 20. Applicants respectfully assert that greater than 1.2 wt. % is commensurate in scope with the data presented in Example 4. Example 4 discloses the use of 1.24 wt. %, clearly 1.24 wt. % is only a trivial increase in value compared to the greater than 1.2 wt. % presently claimed. As such, it is Applicants' position that "greater than 1.2 wt. %" is within the trend set forth by Example 4, which shows that 1.24 wt. % has greater stability, etc. than 0.8 wt. % and 1.0 wt. %. According to the M.P.E.P., "[t]he nonobviousness of a broader claimed range can be supported by evidence based on unexpected results from testing a narrower range if one of ordinary skill in the art would be able to determine a trend in exemplified data which would allow the artisan to reasonable extend the probative value thereof." See M.P.E.P. §716.02(d), Eighth Edition, Rev. 5, Aug. 2006 at page 700-293 (citing *In re Kollman*, 595 F.2d48, 201 USPQ 193 (CCPA 1979). It is Applicants position that the data presented in Example 4 establishes such a trend.

As such, Applicant respectfully asserts that it would not have been obvious to one of ordinary skill in the art that such a slight percentage increase in surface treatment would result in superior "improvements in heat stability and physical properties for the resulting silicone elastomer." See Specification at page 5, lines 18-19. Therefore, Applicants assert that Cornelius et al. does not and cannot render

claim 1 obvious. Claims 2-3, 11, 16, 18-19 and 21, which depend directly or indirectly therefrom, are likewise not rendered obvious by Cornelius et al.

Like claim 1, independent claim 22 has been amended to include the limitation is directed to a “so as to contain at least 1.2 wt. % up to 12.0 wt. % of an amino-functionalized organosilane or organosiloxane, or a vinyl-functionalized organosilane or organosiloxane.” See Claim 22, as presently amended (emphasis added). As such, it is Applicants’ position that claim 22, like claim 1, cannot and is not rendered obvious by Cornelius et al. Claims 23-26, which depend directly or indirectly therefrom, are likewise not rendered obvious by Cornelius et al.

Reconsideration and withdrawal of this rejection are respectfully requested.

Respectfully submitted,

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Date


Phillip R. Klefer
Reg. No. 55,326

Frenkel & Associates, P.C.
3975 University Drive, Suite 330
Fairfax, VA 22030
Telephone: (703) 246-9641
Facsimile: (703) 246-9646